

IN THE CLAIMS

1. (Currently Amended) A method for automatically updating a source node in a PNNI ATM network, comprising:

a) receiving, at a destination node in said PNNI ATM network, a notification of an address change of said destination node, wherein said destination node comprises a destination endpoint for a soft permanent virtual circuit (SPVC) that connects said source node with said destination node;

b) encoding said address change into a SIG field in a PNNI topology state element (PTSE); ~~and~~

c) issuing said PTSE from said destination node to said source node; and to

d) decoding said address change and automatically updating[[e]] said source node with said address change.

2. (Previously Presented) The method of claim 1 wherein said PTSE is embedded within a PNNI Topology State Packet (PTSP).

3. (Previously Presented) The method of claim 1 wherein said PTSE is issued as part of a scheduled broadcast of status information of said destination node.

4. (Previously Presented) The method of claim 1 wherein said PTSE is issued in response to said notification, said notification regarded as an event within said PNNI ATM network worthy of reporting to other nodes within said PNNI ATM network.

5. (Previously Presented) The method of claim 1 further comprising issuing said PTSE from said PNNI ATM network, said PNNI ATM network being a peer network within a larger PNNI ATM network.

6. (Previously Presented) The method of claim 1 wherein said PTSE has a limited lifetime within said PNNI ATM network.

7. (Original) The method of claim 1 wherein said notification is directed from a network management control station.

8. (Previously Presented) The method of claim 1 wherein said information describing said address change further comprises a new address for said destination node and an old address of said destination node.

9. (Previously Presented) The method of claim 1 wherein said address change is within an NSAP format.

10. (Currently Amended) A method for automatically updating a source node in a PNNI ATM network, comprising:

a) receiving at said source node within said PNNI ATM network, information describing an address change of a destination node within said PNNI ATM network, wherein said destination node comprises a destination endpoint for a soft permanent virtual circuit (SPVC) that connects said source node with said destination node, said address change information comprising an old address for said destination node and a new address for said destination node,

wherein said address change information is encoded within a SIG field in a PNNI topology state element (PTSE);

b) decoding said address change information at said source node;

c)[[b]]) comparing said old address for said destination node with an SPVC destination node address maintained by said source node to establish an SPVC connection supported by said source node; and

d)[[c]]) replacing said SPVC destination node address with said new address if said old address and said SPVC destination node address match.

11. (Previously Presented) The method of claim 10 wherein said PTSE is embedded within a PTSP.

12. (Previously Presented) The method of claim 10 wherein said PTSE is issued as part of a scheduled broadcast of status information of said destination node.

13. (Previously Presented) The method of claim 10 wherein said PTSE is issued in response to said destination node being notified of said address change, said notification regarded as an event within said PNNI ATM network worthy of reporting to said node.

14. (Previously Presented) The method of claim 10 further comprising issuing said PTSE from said PNNI ATM network, said PNNI ATM network being a peer network within a larger PNNI ATM network.

15. (Previously Presented) The method of claim 10 wherein said PTSE has a limited lifetime within said PNNI ATM network.

16. (Currently Amended) The method of claim 10 wherein said address change_is within an NSAP format.

17. (Currently Amended) A machine readable medium having stored thereon sequences of instructions which, when executed by a digital processing system, cause said system to perform a method for automatically updating a source node in a PNNI ATM network, comprising:

in response to a notification of an address change to a destination node in said PNNI ATM network, encoding said address change into a SIG field in a PNNI topology state element (PTSE);

issuing said PTSE from said destination node to said source node over a soft permanent virtual circuit (SPVC) connecting said destination node with said source node; and

decoding said address change and updating said source node with said address change ~~information~~.

18. (Previously Presented) The machine readable medium of claim 17 wherein said PTSE is embedded within a PTSP.

19. (Previously Presented) The machine readable medium of claim 17 wherein said PTSE is issued as part of a scheduled broadcast of status information of said destination node.

20. (Previously Presented) The machine readable medium of claim 17 wherein said notification is regarded as an event within said PNNI ATM network worthy of reporting to other nodes within said PNNI ATM network.

21. (Previously Presented) The machine readable medium of claim 17 where said method further comprises issuing said PTSE from said PNNI ATM network, said PNNI ATM network being a peer network within a larger PNNI ATM network.

22. (Previously Presented) The machine readable medium of claim 17 wherein said PTSE has a limited lifetime within said PNNI ATM network.

23. (Previously Presented) The method of claim 17 wherein said information describing said address change further comprises a new address for said node and an old address of said node.

24. (Previously Presented) The method of claim 23 wherein said address change is within an NSAP format.

25. (Currently Amended) A machine readable medium having stored thereon sequences of instructions which, when executed by a digital processing system, cause said system to perform a method for automatically updating a source node in a PNNI ATM network, comprising:

a) receiving, at said source node within said PNNI ATM network, information describing an address change of a destination node within said PNNI ATM network, wherein said destination node comprises a destination endpoint

for a soft permanent virtual circuit (SPVC) that connects said source node to said destination node, said address change information comprising an old address for said destination node and a new address for said destination node, wherein said address change information is encoded within a SIG field in a PNNI topology state element (PTSE);

b) decoding said address change information at said source node;

c) comparing said old address with an SPVC destination node address maintained by said source node to establish an SPVC connection supported by said source node; and

d) replacing said SPVC destination node address with said new address if said old address and said SPVC destination node address match.

26. (Previously Presented) The machine readable medium of claim 25 wherein said PTSE is embedded within a PTSP packet.

27. (Previously Presented) The machine readable medium of claim 25 wherein said method further comprises issuing said PTSE from said PNNI ATM network, said PNNI ATM network being a peer network within a larger PNNI ATM network.

28. (Previously Presented) The machine readable medium of claim 25 wherein said address change is within an NSAP format.